



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

On the Evaporative Power of Different Kinds of Coal. Edinburgh, 1841. 8vo.—*From Major Bache, U. S. Engineers.*  
 Geography of Great Britain and Ireland, in Chinese.—*From Dr. Diver.*

FOR THE CABINET.

A Lithographic Portrait of Mr. Hassler, Superintendent of the U. S. Coast Survey.—*From Mr. Vaughan.*

The copies of the work of Admiral Schischkow, transmitted for distribution by the Imperial Academy of St. Petersburg, were ordered to be sent to the University of Harvard, Mass.; the University of Virginia; the Philadelphia Library; and the National Institution at Washington.

*Stated Meeting, September 17.*

Present, twenty-two members.

Dr. CHAPMAN, Vice-President, in the Chair.

Letters were received and read—

From the Rev. Charles Gutzlaff, dated Macao, March 16, 1840, making acknowledgments for the honour of his election to membership, and giving information as to his progress in the preparation of the Chinese Dictionary and Grammar:—

From the Royal Academy of Sciences, Institute of France, dated July 5, 1841; the Royal Society of Edinburgh, dated December 7, 1840; the Royal Asiatic Society, without date; the Royal Academy of Sciences of Göttingen, dated April 2, 1841; and the Royal Academy of Sciences of Berlin, dated July 15, and August 10, 1840; transmitting donations to the Library, and acknowledging the receipt of the Transactions and Proceedings of the Society:—

From the Hon. C. C. Cambreleng, Minister to Russia, dated St. Petersburg, June 19, 1841, transmitting, at the request of Admiral Krusenstern, a copy of his Charts of the Pacific Ocean:—

From the Rev. William M. Engles, dated July 17, 1841, transmitting, on behalf of the General Assembly of the Presbyterian Church in the United States of America, a copy of their Minutes for 1841; and on behalf of the Presbyterian Board of Publication, a volume of the early records of the Presbyterian Church in this country:—

From Mr. F. A. Hassler, withdrawing his paper on a transportable barometer, recently presented to the Society.

The following donations were announced:—

#### TO THE LIBRARY.

Abhandlungen der Königl. Akademie der Wissenschaften zu Berlin; *3d and 4th Vols. for 1832, and 1st Vol. for 1838.* Berlin, 1839. 4to.—*From the Royal Academy of Berlin.*

Bericht über die zur Bekanntmachung geeigneten Verhandlungen der Königl. Preuss. Akademie, &c., *for 1839, July to Dec., and for 1840: and Preisfragen der Königl. Preuss. Akademie zur Jubelfeier des Regierungs-Antritts Königs Friedrichs II. auf das Jahr 1844.*—*From the same.*

Annaler for Nordisk Oldkyndighed, udgivne af det Kongelige Nordiske Oldskriftselskab, 1839.—*From the Royal Society of Northern Antiquaries.*

Mémoires de la Société Royale des Antiquaires du Nord, 1838, 1839.—*From the same.*

Transactions of the Royal Society of Edinburgh. Vol. XV. Part 1. Edinburgh, 1841. 4to.—*From the Society.*

Transactions of the Zoological Society of London. Vol. II. Part 5. London, 1841. 4to.—*From the Society.*

Transactions of the Geological Society of London. Vol. VI. Part 1. London, 1841. 4to.—*From the Society.*

Boletín Enciclopédico de la Sociedad Económica de Amigos del País, de Valencia. Nos. 13, 14, 15, 16, 17, 19. Valencia, Jan. to July, 1841. 8vo.—*From the Society.*

Proceedings of the Royal Society of London. Nos. 46, 47. London, 1840, 1841. 8vo.—*From the Society.*

Proceedings of the Academy of Natural Sciences of Philadelphia. No. 3. June, 1841. 8vo.—*From the Academy.*

Pennsylvania State Documents.—Journal of the Senate of Pennsylvania, Session 1841, 3 Vols. Journal of the House of Representatives of Pennsylvania, Session 1841, 3 Vols. Reports of the

- State Treasurer, 1st November 1839 and 1840, 2 Vols.—*From the Commonwealth of Pennsylvania.*
- Suppléments au Recueil de Mémoires Hydrographiques, pour servir d'analyse à l'Atlas de l'Océan Pacifique, par le Vice-Amiral de Krusenstern. St. Petersburg, 1833. 4to.—*From the Author.*
- Atlas de l'Océan Pacifique, dressé par M. de Krusenstern, Contre-Amiral, &c. &c. St. Petersburg, 1827. Folio.—*From the Author.*
- O Auxiliador da Industria Nacional. Vol. IV. Nos. 1, 2, 3, 4, 5. Vol. IX. Nos. 1, 2. Rio Janeiro, 1836, 1841. 8vo.—*From Mr. J. S. de Rebello.*
- Prodromus Systematis Herpetologiæ Caroli Luciani Bonaparte, Muxiniani Principis. 8vo. 1840.—*From the Author.*
- Illustrations of the Affinity of the Latin Language to the Gaelic or Celtic of Scotland. By T. Stratton, &c. &c. Kingston, U. C. 1840. 4to.—*From the Author.*
- Journal of the Franklin Institute of the State of Pennsylvania. Third Series. Vol. II. No. 3. Sept. 1841.—*From the Institute.*
- The American Medical Library and Intelligencer. By Robley Dunglison, M.D., &c. &c. New Series. Vol. I. No. 2.—*From the Editor.*
- Reports in reference to the Construction of the Potomac Aqueduct, and to the Kyanizing of Timber, from the Colonel of the Topographical Engineers, U. S. Washington, 1841. 8vo.—*From Col. J. J. Abert, U. S. Top. Eng.*
- The History of North Carolina from the Earliest Period. By François-Xavier Martin. New Orleans, 1829. 2 Vols. 8vo.—*From Mr. B. F. French.*
- Address delivered at Jefferson College, Louisiana. By Alexander H. Everett, President, &c. New Orleans, 1841. 8vo.—*From the Author.*
- Account of some Parhelias observed at Milford and Camden, Delaware, 14th March. 1841. By A. D. Chaloner, M.D., &c. &c.—*From the Author.*
- Official Register of the United States' Military Academy. 1841.—*From Lieut. Col. Delafeld.*
- What to Observe. By J. R. Jackson. London, 1841. 8vo.—*From the Author.*
- The World in a Pocket Book, &c. By W. H. Crump. Philadelphia, 1841. 12mo.—*From the Author.*

Pantology, or a Systematic Survey of Human Knowledge, &c. &c.  
By Roswell Park, Professor, &c. Philadelphia, 1841. 8vo.—  
*From the Author.*

Supplement to a Paper on the Mutual Action of Permanent Magnets, &c. By the Rev. Humphrey Lloyd, D.D. Dublin, 1841.  
4to.—*From the Author.*

Contributions to Terrestrial Magnetism. No. 2. By Lieut. Col. Edward Sabine, R. A., &c. &c.—*From the Author.*

Report on the Bear Valley Coal District, in Dauphin County, Pennsylvania. By Walter R. Johnson, A.M., &c. &c.—*From the Author.*

Filices Britannicæ, a History of British Ferns. Part 2. By James Bolton, &c. &c. London, 1790. 4to.—*From Mr. John Penington.*

Metaphysische Anfangsgrunde der Naturwissenschaft von Immanuel Kant. Riga, 1786. 8vo.—*From Mr. Du Ponceau.*

Grundlegung zur Metaphysik der Sitten von Immanuel Kant. Riga, 1792. 8vo.—*From the same.*

Psychische Anthropologie, von Gottlob Ernst Schulze, &c. &c. Göttingen, 1826. 8vo.—*From the same.*

Du Droit de la Paix et de la Guerre, &c. &c. Paris, 1793. 8vo.—  
*From the same.*

The Lyric Works of Horace, translated, &c. Philadelphia, 1786. 8vo.—*From the same.*

Statuts de l'Académie des Inscriptions, &c. Stockholm, 1788. 8vo.—*From the same.*

An Arrangement of British Plants according to the Latest Improvements of the Linnean System. Sixth Edition. London, 1818. 4 Vols. 8vo.—*From Mr. Vaughan.*

Principles of Legislation from the MS. of Jeremy Bentham. By M. Dumont, &c. &c. Boston, 1830. 8vo.—*From the same.*

Handbuch der Deutschen Literatur, &c. Von Johann Samuel Ersch, &c. Amsterdam, 1812, 1814, 1815. 3 Vols.—*From the same.*

Memoranda of a Residence at the Court of London. By Richard Rush, &c. &c. Philadelphia, 1833. 8vo.—*From the same.*

Dr. Bache announced the decease of Mr. Joshua Gilpin, a member of the Society, who died on the 22d of August last, at his residence, near Wilmington, Delaware, aged 75.

Dr. B. H. Coates made an oral communication in relation to the Hessian Fly.

Dr. Coates stated that the result of a number of examinations, made in the vicinity of Philadelphia by several observers, on the crops of the present year, has proved the pale yellow larva in the hollow of the straw of wheat, to be the same with that which is ultimately converted into the *Cecidomyia Destructor* of Say, and the Hessian Fly of our cultivators. In many instances, referrible perhaps to a peculiarity in the present season, the animal went through all its stages before escaping from the cavity; thus affording irrefragable evidence of the identity of the species.

In no case known to Dr. C. had any thing resembling a caterpillar or maggot, or any thing apparently capable of locomotion, been found under the sheath of the leaf: the body observed, was always immovable, and fixed in a depression of the straw.

Nor was any insect known to have been found which approached to the genus *Lasioptera*, as given by Meigen; all those examined in the perfect state, which were not the *Ceraphron*, since referred to *Pteromalus* and *Eurytoma*, in either its four-winged or its apterous form, being tipulide animals, and betraying no important difference from those observed by Mr. Say.

Dr. C. called attention to several notices of this subject in the Proceedings of the Academy of Natural Sciences.

Professor Henry, of Princeton, exhibited to the Society a simple form of the *Heliostat*, or instrument for throwing a stationary beam of light into a darkened room.

He stated that this article of apparatus, which is indispensable in delicate experiments on light, is in its usual form a very complex instrument, and consequently very expensive; while the one to which the attention of the Society was directed, is very simple, and scarcely cost more than the tenth part of the price of one of the old form.

It was made in accordance with the plan given by Dr. Thomas Young in the first volume of his *Lectures on Natural Philosophy*, which consists in reflecting a beam of light into the room in a line parallel to the axis of the earth, and then causing it to retain this direction by giving the reflector a rotatory motion equal to the apparent motion of the sun. The instrument consists of a flat block of mahogany, about nine inches long and five inches wide, on which is placed, in an inclined position, the wheel work of a common pocket watch. This serves to give rotatory motion to a brass wheel of about

five inches in diameter, which is so geared into the large wheel of the watch as to make one turn in twenty-four hours. The axis of this wheel is a steel rod, carrying on its upper end a small mirror, which can be set in any position by means of an universal joint. The watch work and the wheel are attached to the mahogany block by a hinge, so that the axis of the wheel can be inclined to the horizon at an angle precisely equal to the latitude of the place where the instrument is to be used.

The adjustment of the instrument is very simple. It is placed on the outside of the window, with the axis of the wheel parallel to the axis of the earth; a meridian line having been traced on the window sill for this purpose. The mirror is then set so that the beam of light is thrown into the room in a line forming the prolongation of the axis of the wheel, which is readily effected by means of a mark previously made on the opposite wall. The beam will preserve this direction during the day, since the mirror and the sun revolve with the same velocity, and are therefore comparatively at rest. The only motion of the beam in reference to terrestrial objects is one of rotation on its own axis. If the required direction of the beam is different from that of the first reflection, a second mirror is used.

Professor Henry's object in exhibiting this article to the Society, was to render this simple contrivance more generally known in our country. He stated that the invention probably belongs to Dr. Young; that it was at least published by him in 1807, although an account of the same instrument is given in the London and Philosophical Magazine for 1833, as a new invention by Mr. Potter. The details of the instrument exhibited, differ from those proposed by Mr. Potter, in the addition of a hinge and clamp-screw, by which the axis may be adjusted to the angle of the latitude. The instrument was constructed by an ingenious watchmaker at Princeton; and its whole cost, including the watch work, was but sixteen dollars.

Dr. Patterson and Mr. Walker read strictures by Mr. Hassler upon a notice of the Massachusetts State Survey which appeared in the Proceedings for June last, and commented on the apparent misconceptions of Mr. Hassler, as did several other gentlemen.

Professor Bache communicated, on behalf of Professor Rümker, of Hamburg, the observations made in 1838, at the observatory in that city, on Encke's comet, with their reductions.

Dr. Patterson, from the Committee appointed in relation to the buildings of the Society, made a further report of progress; and on his motion, additional powers were conferred on the Committee.

---

*Stated Meeting, October 1.*

Present, twenty-nine members.

Mr. DU PONCEAU, President, in the Chair.

Letters were received and read—

From the Royal Geographical Society of London, dated May 12, and July 12, 1841,—the Zoological Society of London, dated August 20, and November 7, 1840, and January 13, May 19, and July 9, 1841,—the Horticultural Society of London, dated July 20, 1841,—and the Linnean Society of London, dated August 12, 1841; announcing the transmission of donations to the Library, and acknowledging the receipt of the Transactions and Proceedings of the Society:—

From Dr. H. J. Bowditch, of Boston, dated Sept. 14, 1841, accompanying a Report of the Bowditch Library, and acknowledging the receipt of the Transactions and Proceedings:—

From Col. J. R. Jackson, dated London, July 19, 1841, transmitting through Mr. Du Ponceau to the Society his work, entitled, “What to Observe:”—

From Mr. Joseph E. Bloomfield, dated New York, September 26, 1841, relative to a deposit made by him with the Society, of two silver goblets and a cestus, taken by one of Pizarro’s soldiers from the Temple of the Sun, in Peru:—

From the Chief Engineer U. S. A., Col. Totten, dated Washington, September 17, 1841, accompanying a donation to the Library; and from Mr. John B. Murray, dated Liverpool, August 28, 1841, offering to the Society, on certain conditions, a printing press at which Dr. Franklin worked when in England. This letter was referred to a committee.